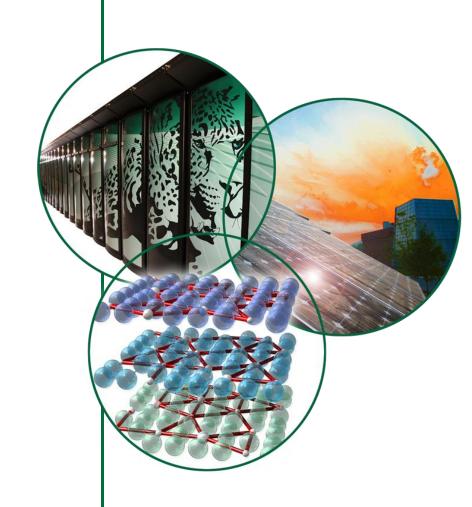
# Frequently asked Questions

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May 17, 2011







#### Overview

• To avoid frustration... here are a few answers to common questions!



#### FAQ – Issue 1 – "Trace unification has terminated"

## Jaguar

#### Error Message :

```
sh: sw/xt5/vampirtrace/5.10/cnl2.2_pgi10.2.0/bin/vtunify: not found VampirTrace: FATAL: Trace unification has terminated abnormally
```

#### Solution:

- Use either vtcc -vt:hyb
- Or vtcc -vt:mpi

## Background:

- Library defaults to sequential version ( vt : seq)
- Post-processing (trace unification) for the sequential uses a binary in /sw that is not avaiable on the compute nodes
- Post-processing (trace unification) for the mpi or hybrid version use an MPI-based library – no need for a separate binary



## FAQ – Issue 2 – nm not found

#### Error Message:

```
VampirTrace: FATAL: Failed to execute /usr/bin/nm -B --demangle --line-numbers /var/spool/alps/4477034/bt_W.16
```

Please set the environment variable VT\_GNU\_NM to the 'nm' command including command line switches which lists symbol/addresses of an object file in BSD-style or set VT\_GNU\_NMFILE to a pre-created symbol list file.

#### Solution:

- \$ module load vampirtrace
- \$ qsub -V ... or #PBS -V in the PBS-script

## • Background:

- VampirTrace uses nm not available on the compute nodes
- module load vampirtrace copies nm & libraries to
  /tmp/work/\$USER/.vt/ and sets various environment variables



## FAQ – Issue 2 – nm not found

#### Error Message:

```
VampirTrace: FATAL: Failed to execute /usr/bin/nm -B --
demangle --line-numbers /var/spool/alps/4477034/bt_W.16
```

Please set the environment variable VT\_GNU\_NM to the 'nm' command including command line switches which lists symbol/addresses of an object file in BSD-style or set VT\_GNU\_NMFILE to a pre-created symbol list file.

#### Alternative solution:

- Add to your job script
  - . /opt/modules/default/etc/modules.sh module load vampirtrace



#### FAQ – Issue 3 – "Maximum number of buffer flushes"

#### Error Message:

```
[11]VampirTrace: Maximum number of buffer flushes
reached (VT_MAX_FLUSHES=1)
[11]VampirTrace: Tracing switched off permanently
```

#### Solution

- Set VT\_MAX\_FLUSHES and VT\_BUFFER\_SIZE
- Use filters
- Limit compiler instrumentation
- Limit runtime of the application (#timesteps, problem size)



# FAQ – How to customize colors in Vampir

- You want to highlight a function in the timeline?
- Solution
  - File → Preferences → Appearance
  - You can also use the performance radar → find function if you are only interested at one particular function



# FAQ – Vampire?

- Just Vampir
  - German vampire...
  - Remember when you type the module load etc..



# Thank you

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